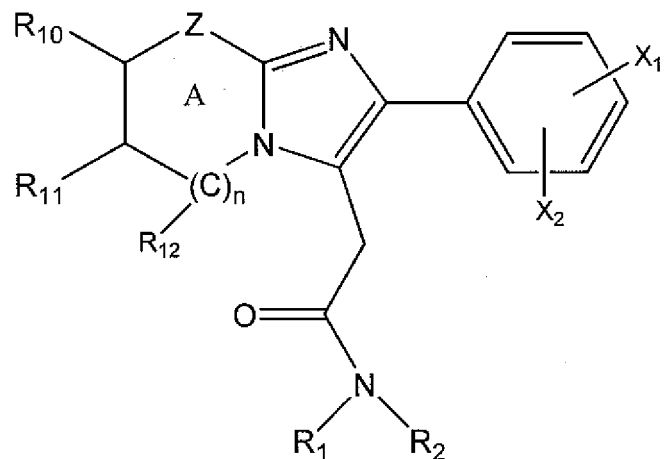
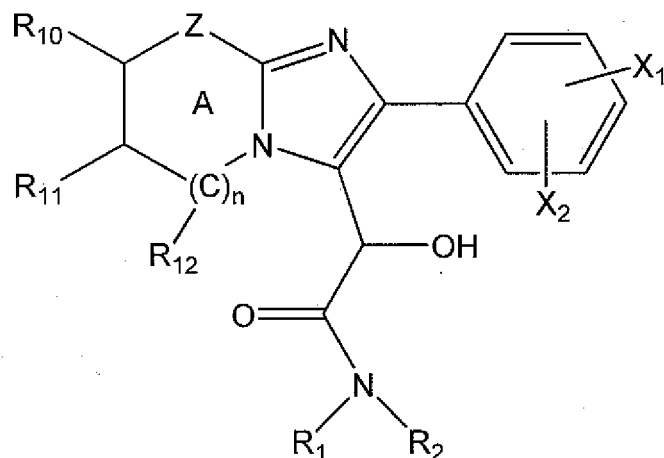


# **AMENDMENTS TO THE CLAIMS**

This listing of the claims will replace all prior versions and listings of claims in the application:

## Listing of Claims:

1. (Currently Amended) A process for the preparation of a heteroaryl acetamide from a heteroaryl  $\alpha$ -hydroxyacetamide, the process comprising directly hydrogenating the heteroaryl  $\alpha$ -hydroxyacetamide in the presence of a strong acid, a halide, and a precious metal catalyst, the heteroaryl  $\alpha$ -hydroxyacetamide having the structure of Formula 1 and the heteroaryl acetamide has the structure of Formula 1A:



wherein

Z is O, NR<sub>20</sub> or CR<sub>21</sub>;

X<sub>1</sub> and X<sub>2</sub> are independently selected from the group consisting of hydrogen, halogen, C<sub>1-4</sub> alkoxy, C<sub>1-6</sub> alkyl, -CF<sub>3</sub> and CH<sub>3</sub>SO<sub>2</sub>-;

R<sub>1</sub> and R<sub>2</sub> are independently hydrogen or hydrocarbyl;

R<sub>10</sub> is hydrogen, halogen, C<sub>1-4</sub> alkyl, or a member of a fused ring wherein the fused ring is (i) a substituted or unsubstituted, saturated or unsaturated, five or six-membered, heterocyclic or carbocyclic ring fused to the A ring comprising R<sub>10</sub>, the carbon atom to which R<sub>10</sub> is attached, R<sub>20</sub>, and the nitrogen atom to which R<sub>20</sub> is attached, or (ii) a six-membered, aromatic, carbocyclic ring fused to the A ring comprising R<sub>10</sub>, R<sub>11</sub>, and the carbon atoms to which R<sub>10</sub> and R<sub>11</sub> are attached, optionally substituted with Y at a substitutable position thereof;

R<sub>11</sub> is hydrogen, halogen, C<sub>1-4</sub> alkyl, or a member of a fused ring wherein the fused ring is (i) a six-membered, aromatic, carbocyclic ring fused to the A ring comprising R<sub>10</sub>, R<sub>11</sub>, and the carbon atoms to which R<sub>10</sub> and R<sub>11</sub> are attached, optionally substituted with Y at a substitutable position thereof, or (ii) a six-membered, aromatic, carbocyclic ring fused to the A ring comprising R<sub>11</sub>, R<sub>12</sub>, and the carbon atoms to which R<sub>11</sub> and R<sub>12</sub> are attached, optionally substituted with Y at a substitutable position thereof;

R<sub>12</sub>, if present, is hydrogen, halogen, C<sub>1-4</sub> alkyl, or a member of a fused ring wherein the fused ring is (i) a six-membered, aromatic, carbocyclic ring fused to the A ring comprising R<sub>11</sub>, R<sub>12</sub>, and the carbon atoms to which R<sub>11</sub> and R<sub>12</sub> are attached, optionally substituted with Y at a substitutable position thereof;

R<sub>20</sub> is C<sub>1-5</sub> alkyl or a member of a fused ring wherein the fused ring is a substituted or unsubstituted, saturated or unsaturated, five or six-membered, heterocyclic or carbocyclic ring fused to the A ring comprising R<sub>10</sub>, the carbon atom to which R<sub>10</sub> is attached, R<sub>20</sub>, and the nitrogen atom to which R<sub>20</sub> is attached;

$R_{21}$  is hydrogen, halogen or  $C_{1-4}$  alkyl;

$n$  is 0 or 1;

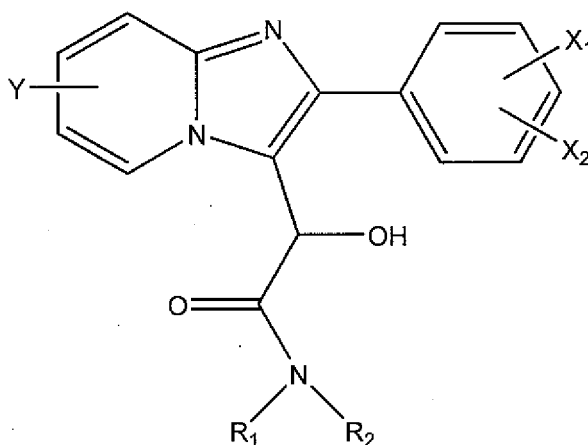
each  $Y$  is independently hydrogen, halogen or  $C_{1-4}$  alkyl; and

when  $Z$  is  $CR_{21}$ , the A ring is aromatic.

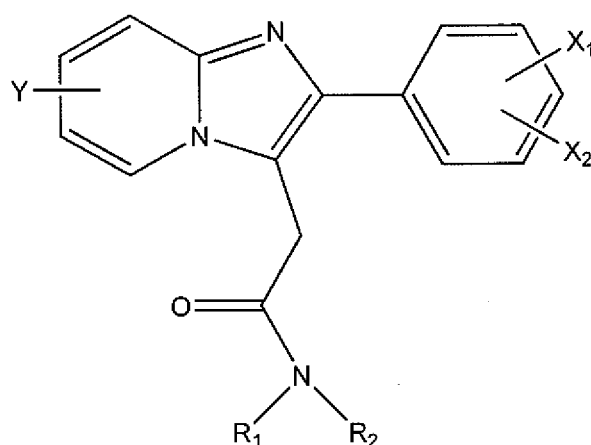
2-5. (Canceled)

6. (Original) The process of claim 1 wherein  $X_1$  and  $X_2$  are independently selected from the group consisting of hydrogen, halogen,  $C_{1-4}$  alkoxy and  $C_{1-6}$  alkyl,  $R_1$  and  $R_2$  are independently hydrogen or  $C_{1-5}$  alkyl and  $Y$  is hydrogen, halogen or  $C_{1-4}$  alkyl.

7. (Currently Amended) A process for the preparation of an imidazopyridine acetamide from an imidazopyridine  $\alpha$ -hydroxyacetamide, the process comprising directly hydrogenating the imidazopyridine  $\alpha$ -hydroxyacetamide in the presence of a strong acid, a halide, and a precious metal catalyst, the imidazopyridine  $\alpha$ -hydroxyacetamide has the structure of Formula 6 and the imidazopyridine acetamide has the structure of Formula 6A:



6



6A

wherein

Y is hydrogen, halogen or C<sub>1-4</sub> alkyl;

X<sub>1</sub> and X<sub>2</sub> are independently selected from the group consisting of hydrogen, halogen, C<sub>1-4</sub> alkoxy, C<sub>1-6</sub> alkyl, -CF<sub>3</sub> and CH<sub>3</sub>SO<sub>2</sub>-; and

R<sub>1</sub> and R<sub>2</sub> are independently hydrogen or C<sub>1-5</sub> alkyl.

8-10. (Canceled)

11. (Original) The process of claim 7 wherein Y is methyl, X<sub>1</sub> and X<sub>2</sub> are independently hydrogen or methyl and R<sub>1</sub> and R<sub>2</sub> are methyl.

12-13. (Canceled)

14. (Previously Presented) The process of claim 7 wherein the strong acid is sulfuric acid.

15-16. (Canceled)

17. (Previously Presented) The process of claim 7 wherein the halide is a bromide ion.

18-26. (Canceled)

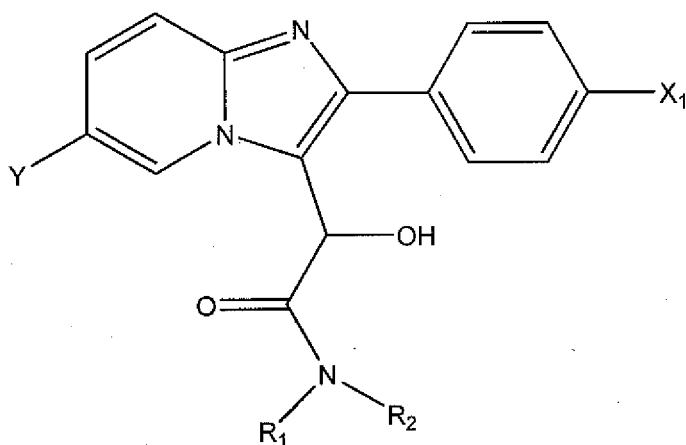
27. (Currently Amended) The process of claim 7 wherein the precious metal catalyst is a palladium catalyst.

28-29. (Canceled)

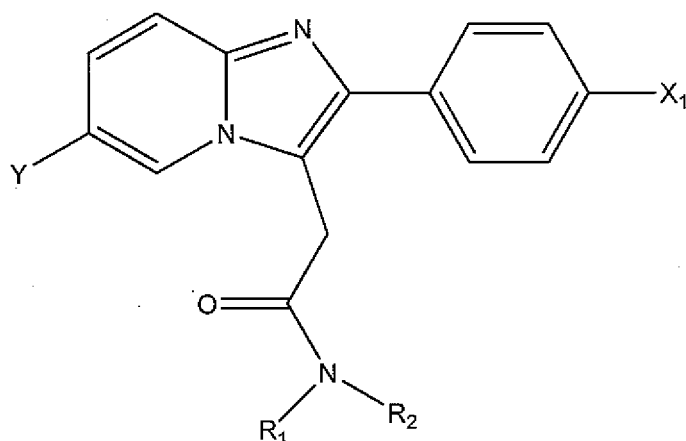
30. (Currently Amended) The process of claim 27 wherein the precious metal catalyst is palladium on barium sulfate.

31-34. (Canceled)

35. (Original) A process for the preparation of an imidazopyridine acetamide from an imidazopyridine  $\alpha$ -hydroxyacetamide, the process comprising directly hydrogenating an imidazopyridine  $\alpha$ -hydroxyacetamide in the presence of hydrogen gas, a strong acid or mixture of strong acids with a pKa of about -9 or less, a chloride or bromide ion and a palladium catalyst, wherein the imidazopyridine  $\alpha$ -hydroxyacetamide has the structure of Formula 7 and the imidazopyridine acetamide product has the structure of Formula 7A:



7



7A

wherein

Y is C<sub>1-4</sub> alkyl;

X<sub>1</sub> C<sub>1-4</sub> alkyl; and

R<sub>1</sub> and R<sub>2</sub> are independently hydrogen or C<sub>1-5</sub> alkyl.

36. (Original) The process of claim 35 wherein Y, X<sub>1</sub>, R<sub>1</sub> and R<sub>2</sub> are methyl.

37. (Original) The process of claim 35 wherein the bromide or chloride ion is a bromide ion.

38-40. (Canceled)

41. (Previously Presented) The process of claim 35 wherein the palladium catalyst is palladium on barium sulfate.

42. (Original) The process of claim 35 wherein the imidazopyridine α-hydroxyacetamide, the strong acid, the chloride or bromide ion and the palladium catalyst is dissolved in a solvent of methanol, ethanol, n-propanol, formic acid, acetic acid, ethanoic acid or propionic acid.

43. (Canceled)

44. (Previously Presented) The process of claim 42 wherein the solvent is acetic acid.

45-46. (Canceled)

47. (Previously Presented) The process of claim 35 wherein the reaction temperature is about 70°C to about 75°C.

48-49. (Canceled)

50. (Previously Presented) The process of claim 35 wherein the reaction pressure is about 2.0 atmospheres to about 2.8 atmospheres.

51. (Original) The process of claim 36 wherein the strong acid is sulfuric acid, the bromide or chloride ion is bromide ion and the catalyst is palladium on barium sulfate.

52. (Previously Presented) The process of claim 35 wherein the strong acid is sulfuric acid, the bromide or chloride ion is bromide ion and the catalyst is palladium on barium sulfate.

53. (Previously Presented) The process of claim 52 wherein the reaction temperature is about 70°C to about 75°C and the reaction pressure is about 2.0 atmospheres to about 2.8 atmospheres.

54. (New) The process of claim 1, wherein the process further comprises directly hydrogenating the heteroaryl  $\alpha$ -hydroxyacetamide in the presence of hydrogen gas, in addition to the strong acid, the halide, and the precious metal catalyst.

55. (New) The process of claim 7, wherein the process further comprises directly hydrogenating the imidazolpyridine  $\alpha$ -hydroxyacetamide in the presence of hydrogen gas, in addition to the strong acid, the halide, and the precious metal catalyst.